

WHAT IS CLAIMED IS:

1. A printed wiring board (PWB) for attaching electrical
2 components thereto, comprising:

3 a stack of insulating layers;

4 conductive layers located between said insulating layers and
5 wherein at least a portion of said conductive layers terminates at
6 a continuous edge of a PWB; and

7 an edge plate interconnect located on said continuous edge of
8 said PWB that contacts at least a portion of said conductive layers
9 at said continuous edge.

2. The PWB as recited in Claim 1 wherein said edge plate
interconnect is a first edge plate interconnect that contacts a
first set of said conductive layers at said continuous edge of said
PWB, and said PWB further includes a second edge plate interconnect
located on said edge that contacts a second set of said conductive
layers at said continuous edge, said first and second edge plate
interconnects forming separate interconnects.

3. The PWB as recited in Claim 2 wherein said continuous
edge is an external edge located at an outer perimeter of said PWB
and said first and second edge plate interconnects form stacked
interconnects.

4. The PWB as recited in Claim 1 wherein said continuous
2 edge is an edge located on an edge of an opening formed within an
3 interior of said PWB.

5. The PWB as recited in Claim 4 wherein said opening is a
2 core-on-board opening for a magnetic core having windings
3 associated therewith.

6. The PWB as recited in Claim 5 wherein said edge plate
2 interconnect is a first edge plate interconnect that contacts a
3 first conductive winding of said magnetic core within said PWB, and
4 said PWB further includes a second edge plate interconnect located
5 on said edge that contacts a second winding of said magnetic core
6 within said PWB, said first and second edge plate interconnects
7 forming separate interconnects for said first and second conductive
8 windings, respectively.

7. A method of manufacturing electrical interconnects for a
2 PWB, comprising:

3 providing a stack of insulating layers having an edge;
4 placing conductive layers between said insulating layers, said
5 conductive layers terminating at a continuous edge of said PWB; and
6 forming an edge plate interconnect on said continuous edge,
7 said edge plate interconnect contacting and electrically
8 interconnecting said conductive layers at said continuous edge.

8. The method as recited in Claim 7 wherein forming an edge
2 plate interconnect includes forming a first edge plate interconnect
3 located on and that contacts a first set of said conductive layers
4 at said continuous edge, and said method further including forming
5 a second edge plate interconnect located on and that contacts a
6 second set of said conductive layers at said continuous edge, said
7 first and second edge plate interconnects forming separate
8 interconnects.

9. The method as recited in Claim 8 wherein said continuous
2 edge is an external edge located at an outer perimeter of said PWB
3 and forming said first and second edge plate interconnects includes
4 forming stacked interconnects.

10. The method as recited in Claim 7 wherein forming said
2 edge plate interconnect includes forming said edge plate
3 interconnect on a continuous edge located in an opening formed
4 within an interior of said PWB.

11. The method as recited in Claim 10 wherein said opening is
2 a core-on-board opening for a magnetic core having windings
3 associated therewith.

12. The method as recited in Claim 11 wherein forming an edge
2 plate interconnect includes forming a first edge plate interconnect
3 on said continuous edge of said core-on-board opening and that
4 contacts a first conductive winding of said magnetic core within
5 said PWB, and further including forming a second edge plate
6 interconnect on an edge of said opening and that contacts a second
7 winding of said magnetic core within said PWB, said first and
8 second edge plate interconnects forming separate interconnects for
9 said first and second conductive windings, respectively.

13. The method as recited in Claim 12 further including
2 attaching electrical components to said PWB, positioning said
3 magnetic core through said core-on-board opening to form a
4 transformer, and interconnecting at least a portion of said

5 electrical components with said transformer using said edge plate
6 interconnect.

14. A power converter, comprising:

2 a printed wiring board (PWB) having conductive layers
3 terminating at a continuous edge of the PWB;

4 edge plate interconnects located on said continuous edge of
5 said PWB; and

6 a transformer including primary and second windings, said
7 primary winding being coupled to a primary circuit by at least one
8 via and said secondary winding being coupled to a secondary circuit
9 by at least one of said edge plate interconnects.

15. The power converter as recited in Claim 14 wherein said

2 edge plate interconnect is a first edge plate interconnect that
3 contacts a first set of said conductive layers at said continuous
4 edge and said PWB further includes a second edge plate interconnect
5 located on said edge that contacts a second set of said conductive
6 layers at said continuous edge, said first and second edge plate
7 interconnects forming separate interconnects.

16. The power converter as recited in Claim 15 wherein said

2 continuous edge is an external edge located at an outer perimeter
3 of said PWB and said first and second edge plate interconnects form
4 stacked interconnects.

17. The power converter as recited in Claim 14 wherein said
2 continuous edge is an edge located on an edge of a core-on-board
3 opening for a magnetic core of said transformer formed in said PWB.

18. The power converter as recited in Claim 17 wherein said
2 edge plate interconnect is a first edge plate interconnect that
3 contacts a first secondary conductive winding of said transformer
4 within said PWB, and said PWB further includes a second edge plate
5 interconnect located on said continuous edge that contacts a second
6 secondary winding of said transformer within said PWB, said first
7 and second edge plate interconnects forming separate interconnects
8 for said first and second conductive windings, respectively.

19. The power converter as recited in Claim 18 wherein said
2 primary windings are interconnected by vias, but not by said edge
3 plate interconnects.